

EPO - DG 1

Sch/svk/KVLMT-2

31.12.2003

NEW CLAIMS

(68)

1. Orthopaedic device, in particular a prosthesis or an orthosis, for the purpose of replacing respectively supporting the function of at least one part of a human limb with a pivotable joint, for example a leg with a knee or an arm with an elbow, on either side of which joint there extend 5 respective limb parts, such as a lower leg and an upper leg respectively a lower arm and an upper arm, which device comprises:

a structure comprising two substantially rigid parts, for instance a rod, which parts are coupled to each other by 10 means of hinge means and each comprise fastening means for optional temporary fastening to a limb part,

wherein a pivot axis of the hinge means extends at least more or less in the region and in the direction of the pivot axis zone of the relevant joint,

15 characterized in that

the hinge means comprise two hinges, the respective pivot axes of which extend in directions which make an angle with each other of  $90^\circ \pm 40^\circ$ , preferably  $90^\circ \pm 20^\circ$ ;

20 in that bounding means are present for limiting to a chosen angular position at least one of the pivoting movements of at least one of the hinges;

and in that

25 the fastening means comprise at least two divisible rings with adjustable periphery, one of which is connected to the one part and the other to the other part, and the bounding means comprise a flexible, tensively strong element, for instance a strap or cord, of optionally adjustable length, the ends of which are connected to these rings such that the flexible element can bound the pivoting movement of at least 30 one hinge.

2. Device as claimed in claim 1,  
characterized in that

the pivot axes are located spatially at a mutual distance, which distance is chosen such that it corresponds 35 with the pivoting characteristics of the relevant joint.

3. Device as claimed in claim 1,

characterized in that  
the bounding means comprise stop means added to a  
hinge.

4. Device as claimed in claim 1,  
5 characterized in that  
said structure is provided on only one side with  
hinge means.

10 5. Device as claimed in claim 1,  
characterized in that  
the device is a knee orthosis.  
6. Device as claimed in claim 1,  
characterized in that  
the device is a knee-ankle-foot orthosis.